Front Matter
Notes to Authors and Subscribers

1. The Proceedings of the Iowa Academy of Science is a quarterly publication, issued by the Iowa Academy of Science.

2. The Proceedings publishes original research in the various fields represented by its membership, short research notes, authoritative review articles, informed commentaries by scientists on topics of general interest, articles dealing with science teaching, and other material of interest to its members. As the publication of a multidisciplinary scientific organization, it welcomes material of general interest to the scientific community.

3. The Editorial Staff and Editor will examine manuscripts from members of the Academy or from other workers in scientific fields. Preference for space will be given to manuscripts by members, and members of the Academy or from other workers in scientific fields.

4. Manuscripts should be sent to the editor, Dr. T. E. Rogers, Department of Biology, Cornell College, Mt. Vernon, Iowa 52314.

5. The manuscripts must be typewritten, double-spaced throughout, including tables, footnotes, figure captions, and references. Submit an original and a carbon or xeroxed copy. Research papers should normally consist of the following sections arranged in this order: a) A title page showing the title of the paper, author, institution, an adequate postal address, including a special summer address if necessary, and an abbreviated version of the title suitable for a running head; b) An abstract, brief but complete enough to be used directly by abstracting services, with appropriate index descriptors; c) Introductory remarks, without a special heading; d) Materials and Methods; e) Results; f) Discussion and Conclusion; g) References. The abstract should be on a separate page. Start a new page with references. At the end of the manuscript place separate pages for each of the following: references, footnotes, figure captions, and each table presented. Number these consecutively with the text.

Authors should refer to the Style Manual for Biological Journals for details of style, and format. It can be obtained from the American Institute of Biological Sciences, 3900 Wisconsin Ave., NW, Washington, D.C. 20016.

References at the end of the manuscript should be arranged in alphabetical order according to the name of the first author. They should not be numbered. Use the author, date citation in the body of the text.

Each reference should include the name of all of the authors, with the last name first for the first author only. Follow with the year of publication, the title of the paper, the journal, volume number, and first and last pages. Do not include number of figures or plates.

Use italics (indicated by underlining) for generic and specific names, for the title of books, and for the name of journals.

Use boldface (indicated by underlining with a wavy line) for the number of the journal volume.

Abbreviate the names of journals as in Chemical Abstracts, the Style Manual for Biological Journals, or the Biological Abstracts.

Chemical terms should be consistent with the system used in the index of the Chemical Abstracts.

Use the binomial Latin name of organisms in full when they are first mentioned, underlining them to indicate italics. Subsequently the generic name may be abbreviated, or, if preferred, the common name may be used, if it has been introduced with the full name originally.

The chemical or scientific name of a chemical must be used when the compound is first referred to. If abbreviations or popular or trade names are to be used, place them throughout the text.

It is preferable to define the concentration of solutions in terms of normality or molarity, or as the wt of solute in a definite volume of solvent. Use % only to express g/100g of solution. Use % (v/v) to express ml/100 ml and % (w/v) for g/100 ml of solution.

Follow the recommendations of the Style Manual for Biological Journals for abbreviations. Do not write out numbers except at the start of a sentence or where no space is saved by using numbers. Use 2nd rather than "second" in labels, legends, and technical descriptions. Use chemical formulae for common chemicals.

Plan illustrations so they will fit comfortably in one column or on the whole page. The maximum size of a figure is 7% by 5% inches. Keep original illustrations within the size of a manuscript page, if possible. If larger illustrations are sent, they must be accompanied by smaller photographs of good quality to permit reviewing.

Authors should refer to the Manual for Biological Journals for instructions about typesetting and lettering. They should not be less than 1.5 mm high when reduced. Mount photographs on white bristol board or the equivalent. Where possible, group figures to fit a page, allowing room for the figure caption at the bottom. The figure numbers of grouped figures should be drawn at the lower right-hand corner of each figure, large enough to be read up to 3 cm from the caption. After reduction, the number all figures in a single series (Figs. 1, 2, 3) even though grouped on one or several pages. To avoid problems created by reduction, show magnification of figures by a scale on the figure itself.

Where an excessive number of figures are included with the manuscript, the authors will be asked to defray the cost of engraving. The editor will notify authors in advance, if this is to be the case, and give approximate costs. No color figures can be printed.

Authors will be subject to page charges should a double-spaced manuscript run over 30 pages. Authors are also subject to charges for changes in the galley proof, other than printer's errors, if they go beyond four lines.

6. Research notes should consist of a short introductory statement, a brief statement of the materials and methods used, and a report of the new data presented. They should run no more than three or four double-spaced pages. Longer articles are best handled as regular research papers.

7. Reprints may be ordered from the editor at the time the galley proofs are returned. Note the reprint costs as indicated inside of the back cover. Full details on any page charges or costs of illustrations will be sent to the author with the galley proof.

8. Back copies of the Proceedings can be obtained from the Librarian, Iowa State Univ., Ames, Iowa 50010. Annual volumes are priced at $4.00 through 1970. The quarterly issues, beginning in 1971, are $3.00 per issue. The four issues making up a year's printing are priced at $5.00. Orders for back copies should be sent to the Executive Secretary, Dr. Robert Hanson, Dept. of Chemistry, Univ. of Northern Iowa, Cedar Falls, Iowa 50613.

9. Subscription to the Proceedings of the Iowa Academy of Science is included in the membership dues of the Academy. The annual dues are $10.00 for regular members; $4.00 for student members. Application blanks for membership may be obtained from the Executive Secretary, Dr. Robert Hanson, Dept. of Chemistry, Univ. of Northern Iowa, Cedar Falls, Iowa 50613. Any member or subscriber whose address changes during the year should notify the Executive Secretary.

The Proceedings of the Iowa Academy of Science, Vol. 78, No. 3, 4, January 1972. Published quarterly by the Iowa Academy of Sciences, Cedar Falls, Iowa 50613. © by the Iowa Academy of Science. Printed by Publications Department, The University of Iowa, Iowa City, Iowa.